the STOP-NIDDM trial was developed to replicate the management of IGT patients over the 3.3-year trial period. The cost-effectiveness measures were cost per patient free of diabetes and cost per month free of diabetes. Analyses were performed for the total trial population and three subgroups: high risk for diabetes, high risk for CV disease and high risk for combined diabetes-CV disease. Total direct costs were calculated using standard sources and published literature. Costs and outcomes were discounted at 3% and extensive sensitivity analyses were conducted. **RESULTS:** The incremental cost per patient free of diabetes (month free of diabetes) was 3032€ (136€) and 829€ (35€) for the total study population and high risk diabetes subgroup respectively. Acarbose treatment dominated (i.e. was more effective, less costly) placebo in subgroups at high CV risk and high combined diabetes-CV risk. Deterministic sensitivity analyses showed that the discount rate for costs and the probability of transition to diabetes had the largest impact on results. **CONCLUSIONS:** Acarbose treatment significantly reduces the incidence of diabetes and CV events in IGT patients. This clinical advantage is expected to lead to reductions in healthcare costs that exceed the acquisition cost of acarbose, thus resulting in overall cost savings in high risk subgroups for CV disease and combined diabetes-CV disease. For the total study population and the high risk diabetes subgroup, savings from fewer cases of diabetes and CV events partly offset the cost of acarbose.

PDB34

A PHARMACOECONOMIC ANALYSIS OF THE USE OF AN INTENSIVE STRATEGY FOR TREATMENT OF PATIENTS WITH DIABETES MELLITUS TYPE 2 (DM T2)

Smirnova OM[1], Komarova VP[2]
[1]Endocrinology Research Center, Moscow, Russia; [2]Aventis Pharma, Moscow, Russia

OBJECTIVE: To estimate the cost of intensive treatment of DM T2patients (insulin therapy and combined treatment with insulin and oral hypoglycemic agents (OHAs)). **METHODS:** The study was conducted for 24 weeks and included 4 visits. In total, 153 patients in DM T2 were examined (65% women and 35% men). The average age was 56.7 years, the duration of the disease was 9.5 years. The cost of treatment included: the cost of patient observation, daily test monitoring, diagnostic manipulations and consultations and cost of the medicines used. Analysis of expenditures was conducted using the incremental cost estimation method that takes into account only the changing quantities. **RESULTS:** All the patients were divided into two groups in dependence on the result obtained: group 1 (85 pts.), with a level of HbA1c < or = 7.0%, and group 2 (68 pts.), with a level of HbA1c > 7% (p = 0.2784). In group 1, 60 patients received insulin monotherapy and 25—a combination of insulins and OHAs. In group 2, these subgroups counted 34 and 34 patients, respectively. The intensive treatment was associated with increases in the patient management costs by USD 0.89/patient in group 1 and USD 0.78/patient group 2. The cost of treatment increased because of an increase in the consumption of insulin and expenditures on intensive observation. **CONCLUSION:** The cost of achieving the clinical efficacy criteria in the group where optimal glycemic control was achieved turned out to be comparable with the cost of managing patients in the group where this control was not achieved. However, in group 1, a decrease in the cost of treatment of concurrent diseases was noted. Thus, proof was obtained: glycemic control is the major determinant of the development of cardiovascular complications of advanced DM.

DIABETES

DIABETES—Quality of Life/Utility/Preference Studies

PDB24

CONTINGENT VALUATION OF AN INHALED DELIVERY SYSTEM FOR INSULIN

Sadri H, MacKeigan L, Einarson TR, Leiter LA
University of Toronto, Toronto, ON, Canada

OBJECTIVES: Various delivery systems for inhaled insulin (INI) are under development. However, they will likely be substantially more expensive than subcutaneous insulin (SCI). Whether this increased cost is justified is an important question which can be addressed through Contingent Valuation (CV), a survey technique that elicits individuals' preferences for non-marketed products in terms of the amount they would be willing-to-pay. The purpose of this study was to assess diabetic (DM) patients' preference and willingness-to-pay (WTP) for INI. **METHODS:** A face-to-face CV survey was administered to 96 type-1 and type-2 adult DM patients at St. Michael's Hospital (Toronto, Canada) who were taking insulin and/or oral antihyperglycaemic drugs. Standardized information about INI and SCI was provided by video, and participant's WTP was elicited using "payment scale" method, along with socioeconomic and clinical data. Published data was used to define INI attributes. The CV questionnaire received expert review for content validity and was pilot tested with 22 patients. **RESULTS:** Participants were 51.8 ± 13.4 years old, and had DM for an average of 11.8 ± 7.8 years; 77 had type-2 and 19 had type-1 DM. Significantly more participants (89%) preferred INI over SCI ($P < 0.01$). The mean monthly WTP for INI ($153.70 ± $99.90) was significantly more than typical SCI cost of $50 ($P < 0.01$). A greater proportion of type-2 patients (n = 72/77) preferred INI than did type-1 patients ($P < 0.001$). The mean WTP for INI in type-2 subgroup ($177.10 ± $91.60) was significantly more compared to type-1 ($154 ± $66.6, $P = 0.025$). Significantly more participants who were not on insulin preferred INI compared to participants using insulin ($P < 0.001$). Multiple-regression analysis showed strong association between participants' income and insulin experience and their WTP for INI ($P < 0.001$). **CONCLUSIONS:** DM patients prefer INI over SCI and are willing-to-pay significantly more per month than the cost of SCI. Preferences are stronger in type-1 patients DM and those with prior insulin experience.

PDB25

QUALITY OF LIFE IN SUBJECTS WITH AND WITHOUT TYPE-2 DIABETES MELLITUS

Perelli Cippo P, Scalone L, Micheletti S, Mantovani LG
University of Milan, Milan, Italy

OBJECTIVES: Type-2 diabetes mellitus is a chronic and progressive disease with a negative impact on quality of life. Objectives of the present study were to describe Health-Related Quality of life (HRQOL) in type-2 diabetes mellitus and to compare the health state between diabetic and non-diabetic subjects. **METHODS:** Type-2 diabetes mellitus patients were selected from a representative sample of the Italian general population aged from 40 to 79 years enrolled in a population based naturalistic prospective survey. We matched each of them by age and sex with a non-diabetic subjects. The EuroQoL (EQ-5D), a self-administered generic questionnaire, completed during the enrolment visit, was used to evaluate HRQOL. **RESULTS:** We analyzed two groups of 157 subjects each (diabetic and non-diabetic group). The mean age was 63.0 years, 94 (59.9) were male. Diabetic patients reported more problems than non-diabetic subjects in the physical sphere, specifically for mobility